WM-AF605/BF605

SERVICE MANUAL

US Model
Canadian Model
WM-AF605
AEP Model
UK Model
E Model
WM-BF605

PHOTO : WM-AF605

Model Name Using Similar Mechanism	WM-506
Tape Transport Mechanism Type	MF-WMF180-01

SPECIFICATIONS

Radio section

Frequency range
Canadian model FM: 87.9 – 107.9 MHz
AM: 530 – 1,710 kHz
Other models FM: 87.5 – 108.0 MHz
AM: 531 – 1,602 kHz
Antenna
FM: Headphones cord antenna
AM: Built-in ferrite bar antenna

Tape player section and general

Frequency response (DOLBY NR off)
20 – 18,000 Hz (with the TAPE selector set to NORM or METAL/CrO_2)
Output
Headphones (PHONES jack) (stereo minijack) load impedance 8 – 300Ω
Power output
5 mW + 5 mW at DC operation, 16Ω
Power requirements
1.5 V DC
Rechargeable battery
One R6 (size AA) battery
DC IN 1.5 V jack accepts:
- Sony AC-D1L AC power adaptor (optional) available in Canada for use on 120 V AC, 60 Hz
available in the United Kingdom for use on 240 V AC, 50 Hz
available in other European countries for use on 220 V AC, 50 Hz
available in other countries for use on 100 – 120 V AC or
220 – 240 V AC, 50 or 60 Hz
- Sony EBP-500B battery case (optional) for use with two R20 (size D) batteries
- Sony DCC-70 (optional) for use with 12 V car battery

Battery life

Battery	Playback	Radio Reception
Rechargeable NC-6WM fully charged	Approx. 4 hours	Approx. 6 hours
Rechargeable NC-5WM fully charged	Approx. 3 hours	Approx. 4 hours
Sony SUM-3 (NS)	Approx. 2 hours	Approx. 7.5 hours
Sony AM3 (N)	Approx. 7.5 hours	Approx. 18.5 hours
Rechargeable NC-6WM with Sony AM3 (N)	Approx. 11.0 hours	Approx. 24 hours
Rechargeable NC-5WM with Sony AM3 (N)	Approx. 9.5 hours	Approx. 22 hours

For maximum performance we recommend the use of alkaline batteries.

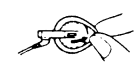
Dimensions
Approx. 107.5 × 74.6 × 27.1 mm (w/h/d) (4 1/4 × 3 × 1 1/8 inches)
not incl. projecting parts and controls
Approx. 109 × 77.7 × 27.6 mm (w/h/d) (4 3/8 × 3 1/8 × 1 1/8 inches)
incl. projecting parts and controls
Weight
Approx. 230g (8.2 oz), incl. rechargeable battery, not incl. other accessories
Accessories supplied
Rechargeable battery (1) Battery charger (1) Lithium battery (1)
Battery case (1) Carrying case (1)

Note on the supplied carrying case
After putting the unit into the supplied carrying case, be sure to fasten the belt of the case to hold the unit securely in the case.

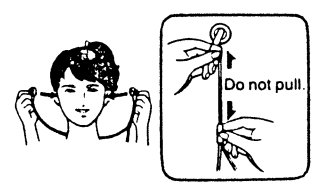
For Canada, the United Kingdom and other European countries
Stereo headphones (open-air type, 1)

For other countries
Stereo earphones (open-air type, 1)
AC plug adaptor (1)

Ear adaptors are attached on the stereo earphones. If the earphones do not fit your ears, detach the ear adaptors.



Note on stereo earphones
Put the cord behind your neck.
The knot cannot be moved.



Design and specifications subject to change without notice.

— Continued on page 2 —

RADIO CASSETTE PLAYER

SONY®

MICROFILM

Note

This appliance conforms with EEC directives 76/889 and 82/499 regarding interference suppression.

Optional accessories

Battery case EBP-500B AC power adaptor AC-D1L
Car battery cord DCC-70 Lithium battery CR-2016

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information about the optional accessories available in your country.

Note

If a car battery cord or an AC power adaptor not manufactured by Sony is used, a fuse must be installed in the battery cord or the adaptor, and the polarity of the plug must be as illustrated.

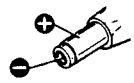


TABLE OF CONTENTS

Section	Title	Page
	Specification	1
1.	GENERAL	3
2.	DISASSEMBLY	5
3.	ADJUSTMENTS	6
4.	DIAGRAMS	
	4-1. Printed Wiring Board –Audio Section–	9
	4-2. Schematic Diagram –Audio Section–	11
	4-3. Schematic Diagram –Radio Section–	14
	4-4. Printed Wiring Board –Radio Section–	17
	4-5. IC Block Diagram	20
	4-6. Semiconductors Lead Layout	22
5.	EXPLODED VIEWS	
	5-1. Cabinet	23
	5-2. Mechanism-1	24
	5-3. Mechanism-2	25
6.	ELECTRICAL PARTS LIST	26

Flexible Circuit Board Repairing

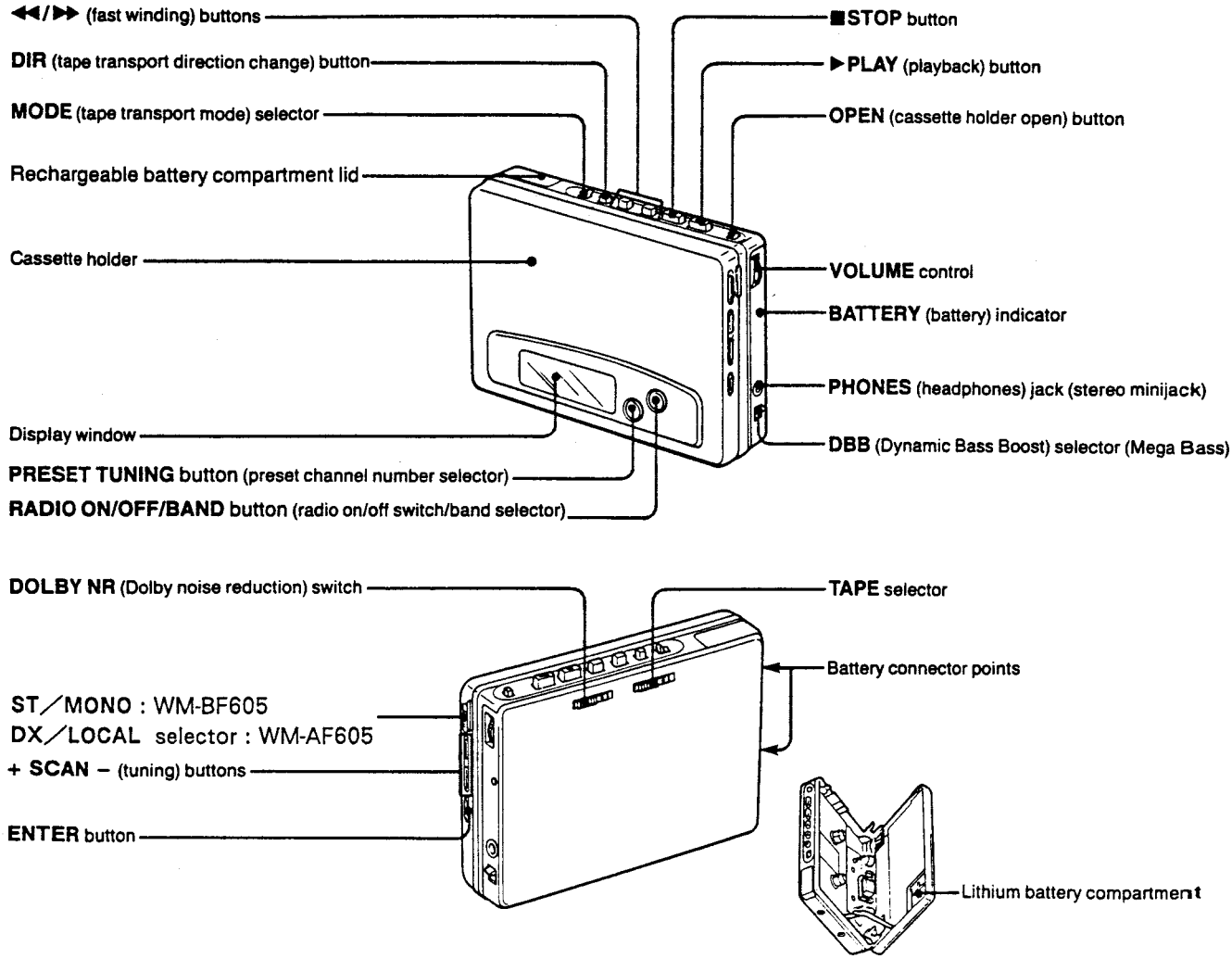
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

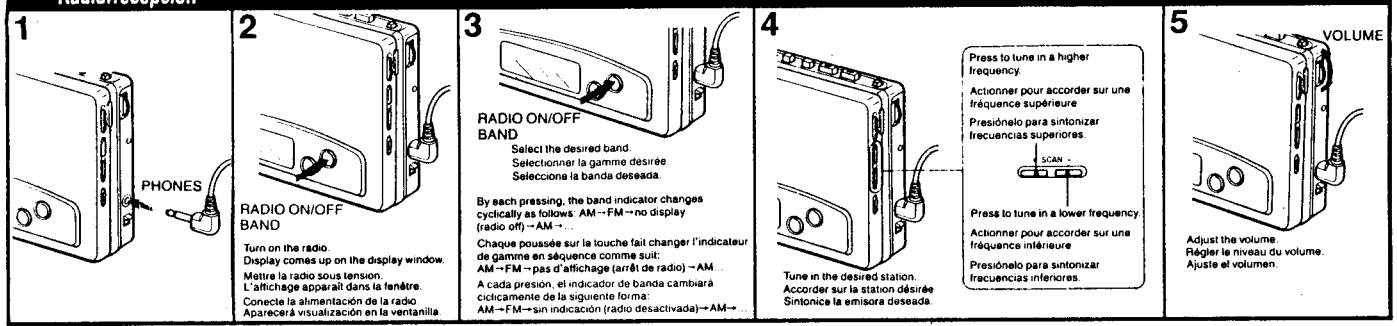
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 1
GENERAL

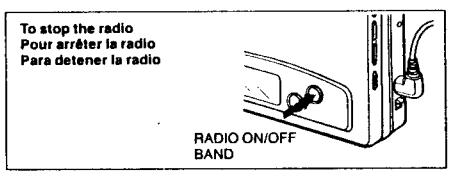
LOCATION AND FUNCTION OF CONTROLS.


◀◀/▶▶ (fast winding) buttons
DIR (tape transport direction change) button
MODE (tape transport mode) selector
Rechargeable battery compartment lid
Cassette holder
Display window
PRESET TUNING button (preset channel number selector)
RADIO ON/OFF/BAND button (radio on/off switch/band selector)
■STOP button
▶PLAY (playback) button
OPEN (cassette holder open) button
VOLUME control
BATTERY (battery) indicator
PHONES (headphones) jack (stereo minijack)
DBB (Dynamic Bass Boost) selector (Mega Bass)
DOLBY NR (Dolby noise reduction) switch
ST/MONO : WM-BF605
DX/LOCAL selector : WM-AF605
+ SCAN − (tuning) buttons
ENTER button
TAPE selector
Battery connector points
Lithium battery compartment

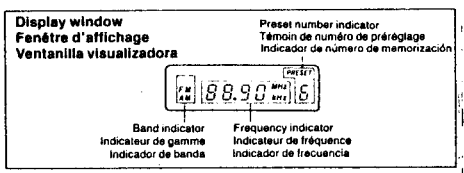
G Radio Reception
Réception de la radio
Radiorrecepción


1
PHONES
2
RADIO ON/OFF
BAND
Turn on the radio.
Display comes up on the display window.
Mettre la radio sous tension.
L'affichage apparaît dans la fenêtre.
Conecte la alimentación de la radio.
Aparecerá visualización en la ventanilla.
3
RADIO ON/OFF
BAND
Select the desired band.
Sélectionner la gamme desirée.
Seleccione la banda deseada.
By each pressing, the band indicator changes cyclically as follows: AM→FM→no display (radio off)→AM→...
Chaque poussée sur la touche fait changer l'indicateur de gamme en séquence comme suit: AM→FM→pas d'affichage (arrêt de radio)→AM...
A cada presión, el indicador de banda cambiará cíclicamente de la siguiente forma: AM→FM→sin indicación (radio desactivada)→AM→...
4
Press to tune in a higher frequency.
Actionner pour accorder sur une fréquence supérieure
Presiónelo para sintonizar frecuencias superiores.
SCAN
Press to tune in a lower frequency.
Actionner pour accorder sur une fréquence inférieure
Presiónelo para sintonizar frecuencias inferiores.
Tune in the desired station.
Accorder sur la station désirée
Sintonice la emisora deseada.
5
VOLUME
Adjust the volume.
Régler le niveau du volume.
Ajuste el volumen.

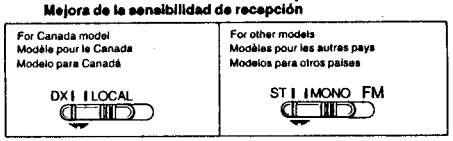
To stop the radio
Pour arrêter la radio
Para detener la radio



Display window
Fenêtre d'affichage
Ventanilla visualizadora

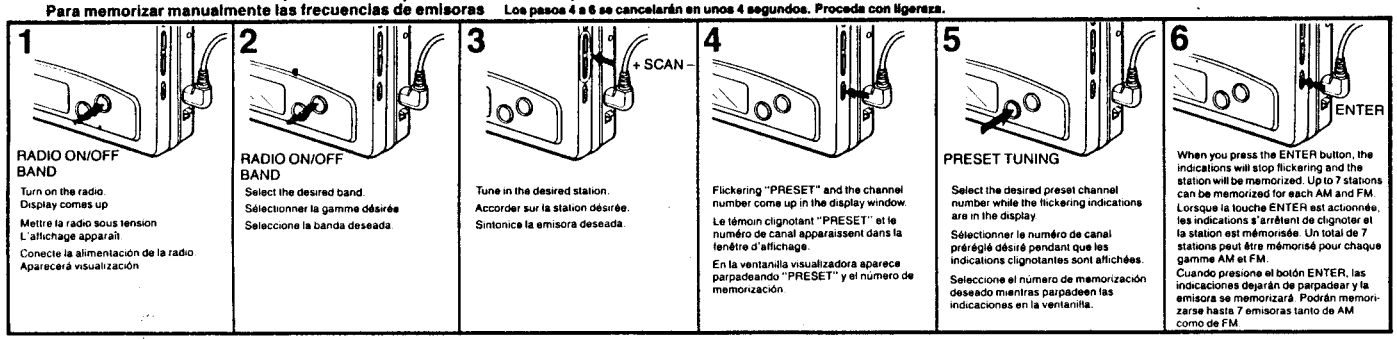


H To Improve Receiving Sensitivity
Amélioration de la sensibilité de réception
Mejora de la sensibilidad de recepción

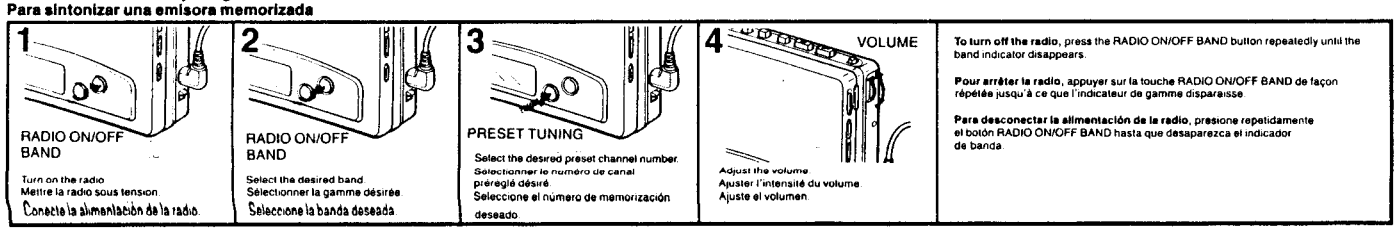


Memory Preset Tuning
Accord préréglé mémorisé
Sintonización memorizada

I To Memorize Station Frequencies Manually
Steps 4 to 6 are cancelled after about 4 seconds. Proceed the step quickly.
Mémorisation manuelle des fréquences
Les étapes de 4 à 6 sont annulées après environ 4 secondes. Effectuer chaque étape rapidement.
Para memorizar manualmente las frecuencias de emisoras
Los pasos 4 a 6 se cancelarán en unos 4 segundos. Proceda con ligereza.


1
RADIO ON/OFF
BAND
Turn on the radio.
Display comes up
Mettre la radio sous tension
L'affichage apparaît
Conecte la alimentación de la radio.
Aparecerá visualización
2
RADIO ON/OFF
BAND
Select the desired band.
Sélectionner la gamme désirée
Seleccione la banda deseada.
3
+ SCAN –
Tune in the desired station.
Accorder sur la station désirée.
Sintonice la emisora deseada.
4
Flickering "PRESET" and the channel number come up in the display window.
Le témoin clignotant "PRESET" et le numéro de canal apparaissent dans la fenêtre d'affichage.
En la ventanilla visualizadora aparece parpadeando "PRESET" y el número de memorización.
5
PRESET TUNING
Select the desired preset channel number while the flickering indications are in the display.
Sélectionner le numéro de canal préréglé désiré pendant que les indications clignotantes sont affichées.
Seleccione el número de memorización deseado mientras parpadeen las indicaciones en la ventanilla.
6
ENTER
When you press the ENTER button, the indications will stop flickering and the station will be memorized. Up to 7 stations can be memorized for each AM and FM.
Lorsque la touche ENTER est actionnée, les indications s'arrêtent de clignoter et la station est mémorisée. Un total de 7 stations peut être mémorisé pour chaque gamme AM et FM.
Cuando presione el botón ENTER, las indicaciones dejarán de parpadear y la emisora se memorizará. Podrán memorizarse hasta 7 emisoras tanto de AM como de FM.

To Tune in a Preset Station
Accord sur une station préréglée
Para sintonizar una emisora memorizada



To turn off the radio, press the RADIO ON/OFF BAND button repeatedly until the band indicator disappears.

Pour arrêter la radio, appuyer sur la touche RADIO ON/OFF BAND de façon répétée jusqu'à ce que l'indicateur de gamme disparaisse.

Para desconectar la alimentación de la radio, presione repetidamente el botón RADIO ON/OFF BAND hasta que desaparezca el indicador de banda.

Radio Reception

To stop the radio, press the RADIO ON/OFF BAND button repeatedly until the band indicator disappears.

There are three ways to tune in.

— **One step scan**
Press either of the SCAN buttons, then release it immediately. With each pressing, the frequency changes as listed below with rapid beeps.

	Canada	Other countries
FM	0.2 MHz	0.05 MHz
AM	10 kHz	9 kHz

— **Seeking scan**
Press either of the SCAN buttons for a second, then release it. The frequency goes up or down automatically and each station can be heard. When a desired station is heard, press the SCAN button again to stop the scanning.

— **Fast scan**
Keep either of the SCAN buttons pressed for more than 1.5 seconds. The frequency goes up or down quickly. When it comes up to your desired station, release the button. When the desired station is heard, press the SCAN button again to stop the scanning.

Note
When you press the tape operation buttons (▶, ▶▶ or ◀◀) during radio reception, the indications on the display window will disappear, the radio will be turned off and the unit will go to the tape operation mode (playback or fast-winding).

To Improve Receiving Condition

FM
Since the headphone (earphone) cord serves as an FM antenna, extend it for better reception.

AM
Since the reception is affected by the direction of the unit, move the unit for optimum reception.

Note
Be sure to remove the cassette tape if it has metallic cassette shell or metallic labels. Such cassettes may cause interference or difficulty in tuning.

To Improve Receiving Sensitivity

For Canada model (for FM and AM)
Use the DX/LOCAL selector.
Normally set to DX. If a very strong signal causes noise, set to LOCAL. The noise will be reduced.

For other models (for FM only)
Use the ST/MONO selector.
Normally set to FM ST. Set to MONO when it is hard to hear the broadcast due to noise.
The reception will be more stable and noise will be reduced but without stereo effect.

To Listen to Heavy and Powerful Radio Sound

Set the DBB (Mega bass) selector to the desired position.
The DBB (Mega bass) selector functions even when receiving the radio sound.

When the battery becomes weak while listening to the radio
The display may go off and BATTERY indicator may glow brightly. (The indicator should glow faintly when the battery becomes weak.)
If this happens, replace or recharge the battery.

Memory Preset Tuning

To Memorize Station Frequencies Manually

Repeat steps 1 to 6 for each AM and FM.

To turn off the radio, press the RADIO ON/OFF BAND button repeatedly until the band indicator disappears.

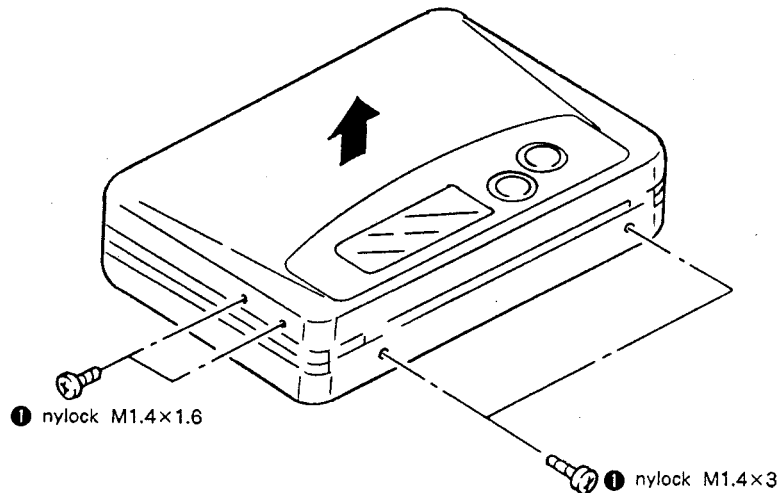
Note
Steps 4 to 6 are cancelled in about 4 seconds after you press the corresponding buttons. If the indications stop flickering before you finish the step, repeat the step again.

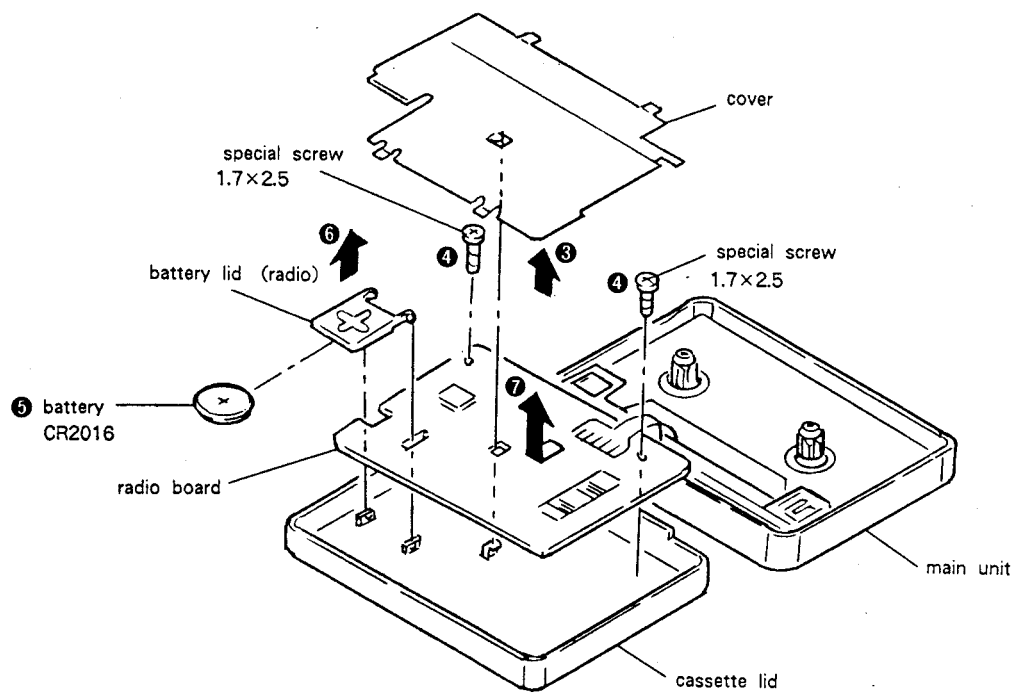
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

Remove the radio board

- Before servicing, please write down the frequencies of the broadcasting stations programmed in the preset memory of the tuner. Then re-program the memories after servicing. (Refer to page 4.)
- Remove in mumerical order, ❶ to ❼.
  Take care not to damage the flexible board after removing the screw fixing the cassette lid and the arm, since the main unit and the cassette lid are connected by the flexible board only.





SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
   playback head　　rubber belts
   capstan　　idlers
   pinch roller
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (1.3V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	22–38g · cm 0.31–0.52 oz · inch
FWD Back Tension		1.0–3.0g · cm 0.02–0.04 oz · inch
REV	CQ-102RB	22–38g · cm 0.31–0.52 oz · inch
REV Back Tension		1.0–3.0g · cm 0.02–0.04 oz · inch
FF	CQ-201B	more than 50g · cm more than 0.7 oz · inch
REW		more than 50g · cm more than 0.7 oz · inch

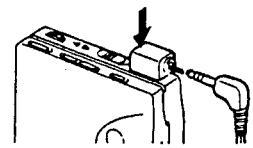
Tape Pulling Force Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 50g more than 1.77 oz
REV	CQ-403R	more than 50g more than 1.77 oz

3-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Power supply voltage : 1.3V
2. Switch position
   FM switch :　ST (DX)
   DOLBY switch :　OFF
   DBB switch :　NORM
3. For electrical adjustments, use the supplied plug conversion adaptor (Part No.1-563-133-11).



Cassette Section

TEST TAPE

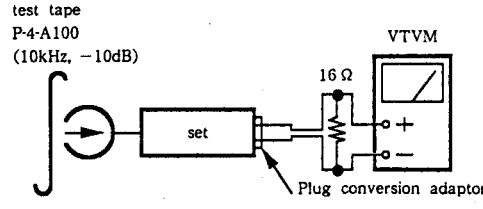
Type	Signal	Used for
WS-48A	3kHz, 0dB	Tape Speed Adjustment
P-4-A100	10kHz, −10dB	Playback Head Azimuth check
P-4-A063	6.3kHz, −10dB	

Playback Head Azimuth Check

Note : This set is not featured the head azimuth adjustment.
When replacing the head, check the both L-ch and R-ch output levels and also those phases.

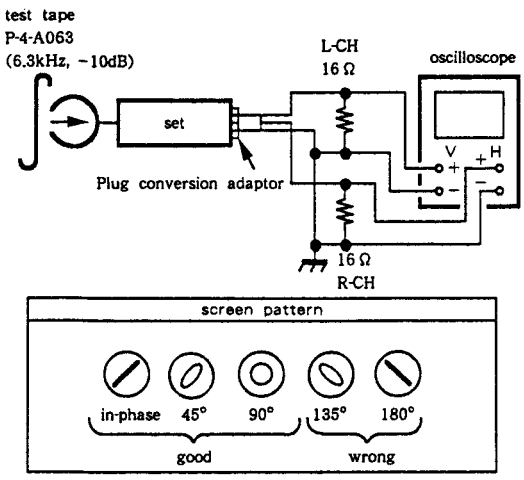
Procedure :

1. Playback mode.

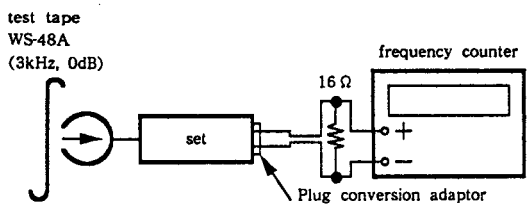


1) Playback the P-4-A100 in FWD mode and read the VTVM (both L-ch and R-ch).
2) Change to REV mode and read the VTVM (both L-ch and R-ch).
3) Confirm that the level difference between step 1 and 2 is within 5dB (both L-ch and R-ch).

2. Phase check

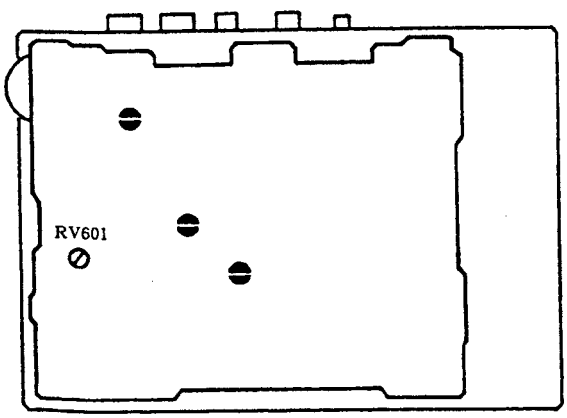


Tape Speed Adjustment
Procedure :



1. Playback WS-48A (tape center portion) in FWD mode. Adjust the RV601 so that the frequency counter reads 3,000Hz±45Hz.
2. Playback WS-48A (tape end portion) in REV mode. Confirm that the reading of frequency counter is within 2.5% from the reading in step 1.

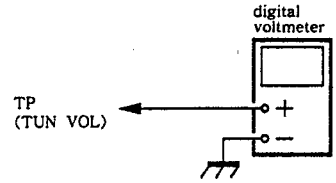
Adjustment Parts Location Diagram



Radio Section

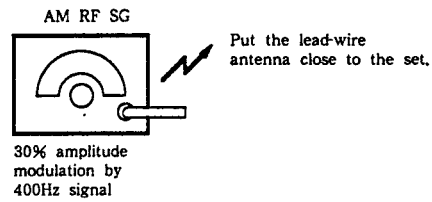
AM SECTION

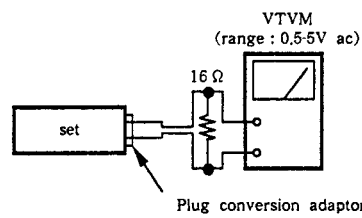
BAND switch : AM



( ) : BF605

AM TUNING VOLTAGE ADJUSTMENT	
Adjust for following values on digital voltmeter.	
Display indication	AM530kHz (531kHz)
Digital voltmeter reading	1.1V
Adjustment part	T2





- Repeat the procedures in each adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.

( ) : BF605

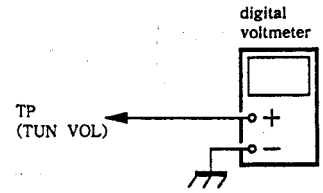
AM TRACKING ADJUSTMENT		
Adjust for a maximum reading on VTVM.		
Display indication	AM630kHz (621kHz)	AM1,490kHz (1,395kHz)
SG frequency	630kHz (621kHz)	1,490kHz (1,395kHz)
Adjustment part	L1	CT1

( ) : BF605

AM IF ALIGNMENT	
Adjust for a maximum reading on VTVM.	
SG frequency	455kHz
Adjustment part	T1

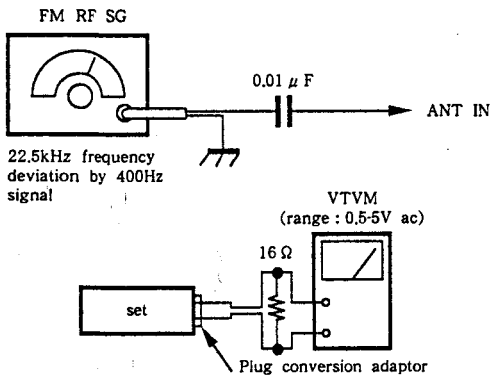
FM SECTION

BAND switch : FM



( ) : BF605

FM TUNING VOLTAGE ADJUSTMENT	
Adjust for following values on digital voltmeter.	
Display indication	FM87.9MHz (87.5MHz)
Digital voltmeter reading	2.7V
Adjustment part	L3



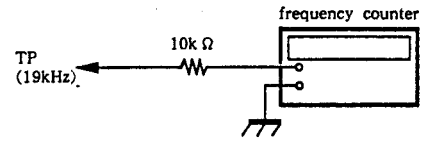
- Repeat the procedures in each adjustment severl times, and the tracking adjustment should be finally done by the trimmer capacitors.

( ) : BF605

FM TRACKING ADJUSTMENT		
Adjust for a maximum reading on VTVM.		
Display indication	FM87.9MHz (87.5MHz)	FM107.9MHz (108.0MHz)
SG frequency	87.9MHz (87.5MHz)	107.9MHz (108.0MHz)
Adjustment part	L2	CT2

VCO Adjustment

BAND switch : FM

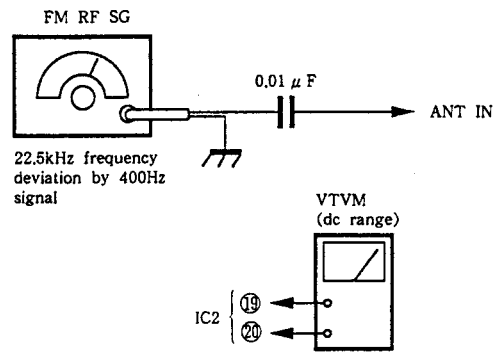


Procedure :

1. Connect an electrolytic capacitor 1 μ F between TP (DET OUT) and ground.
2. Adjust RV1 for 19±0.02kHz on the counter.
3. Remove electrolytic capacitor connected in step 1.

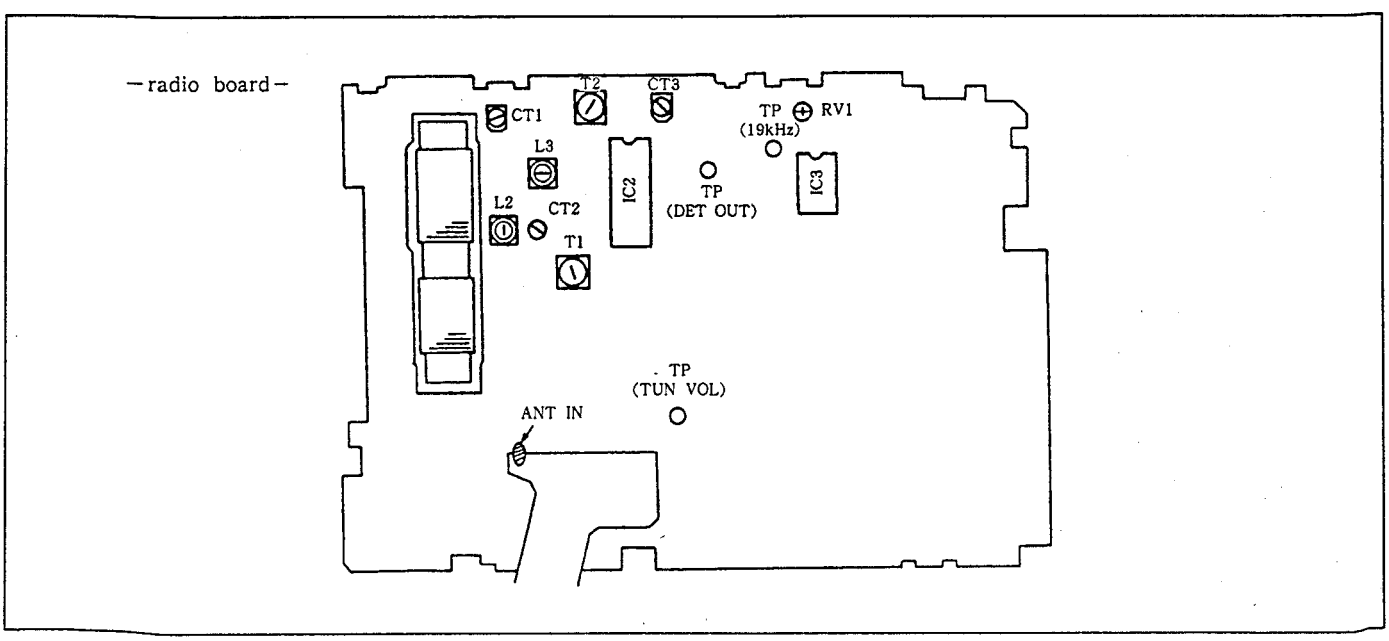
NULL Adjustment

BAND switch : FM



( ) : BF605

Adjust for 0V reading VTVM.	
Display indication	FM87.9MHz (87.5MHz)
SG frequency	87.9MHz (87.5MHz)
Adjustment part	CT3



SECTION 4
DIAGRAMS

4-1. PRINTED WIRING BOARD –AUDIO SECTION–

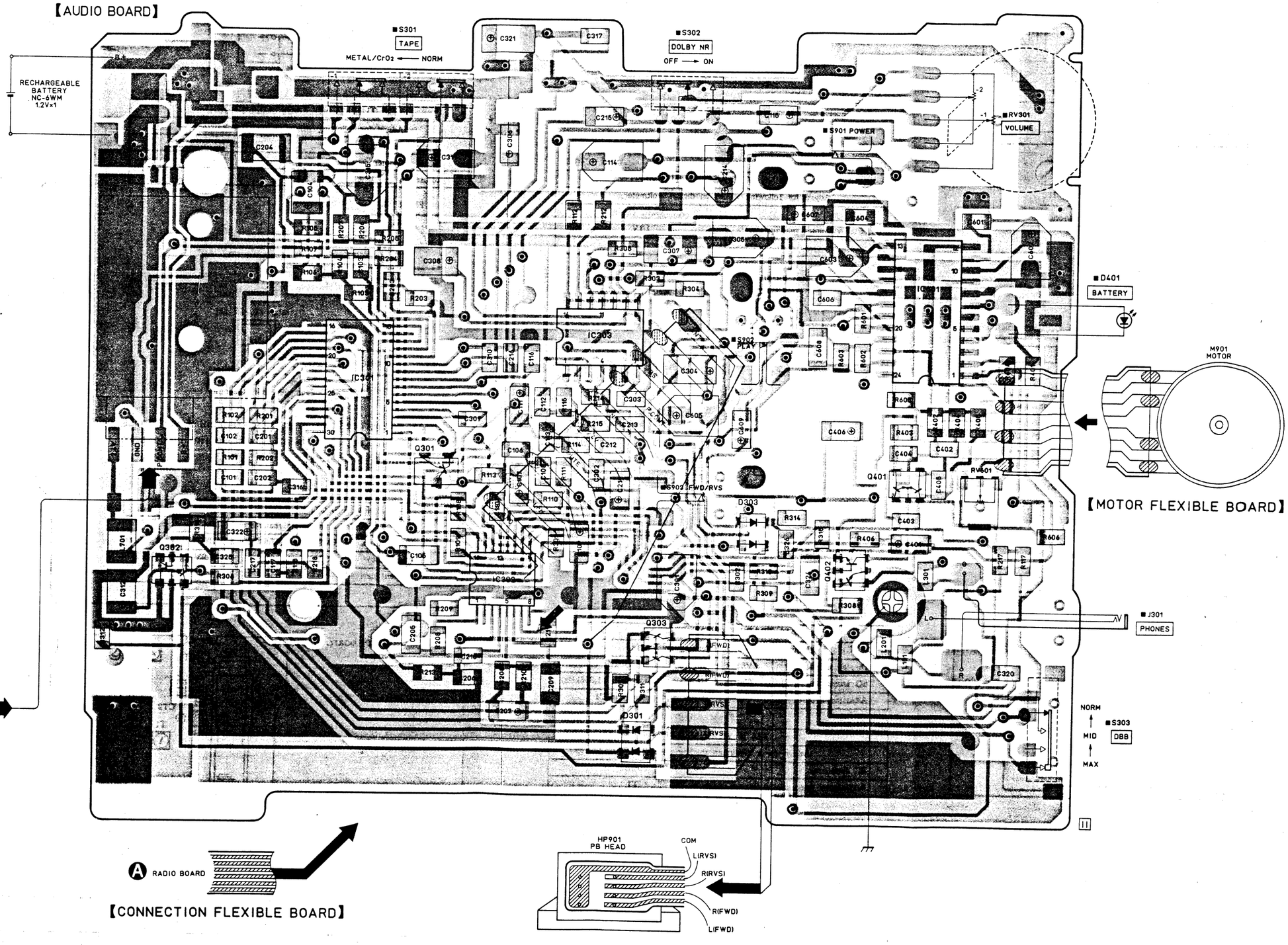
● SEMICONDUCTOR LOCATION

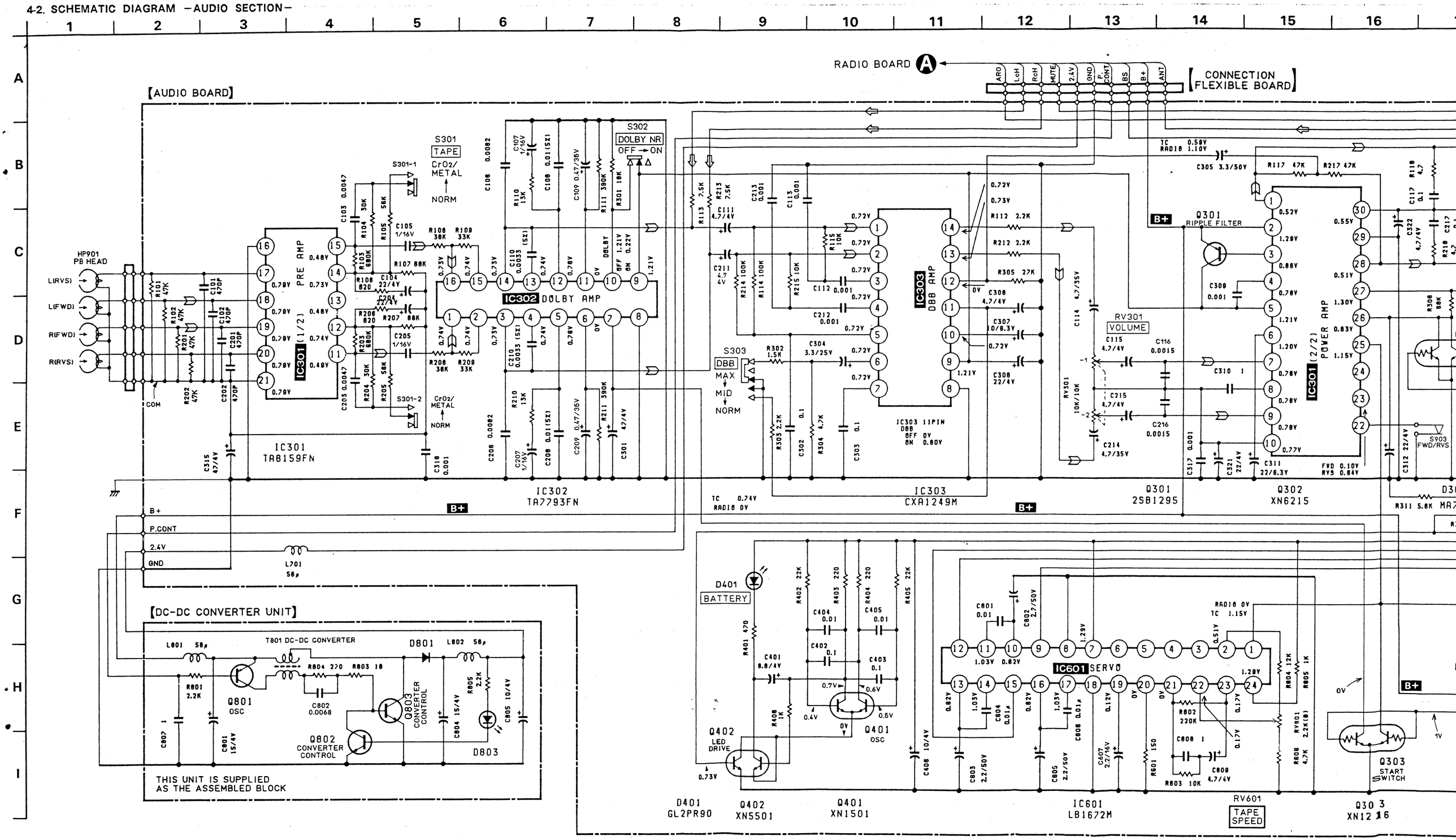
Ref. No	Location
D301	I-10
D303	G-11
IC301	E-7
IC302	G-9
IC303	E-10
IC601	D-13
Q301	F-8
Q302	G-5
Q303	H-10
Q401	F-13
Q402	G-12

Note on Printed Wiring Board :

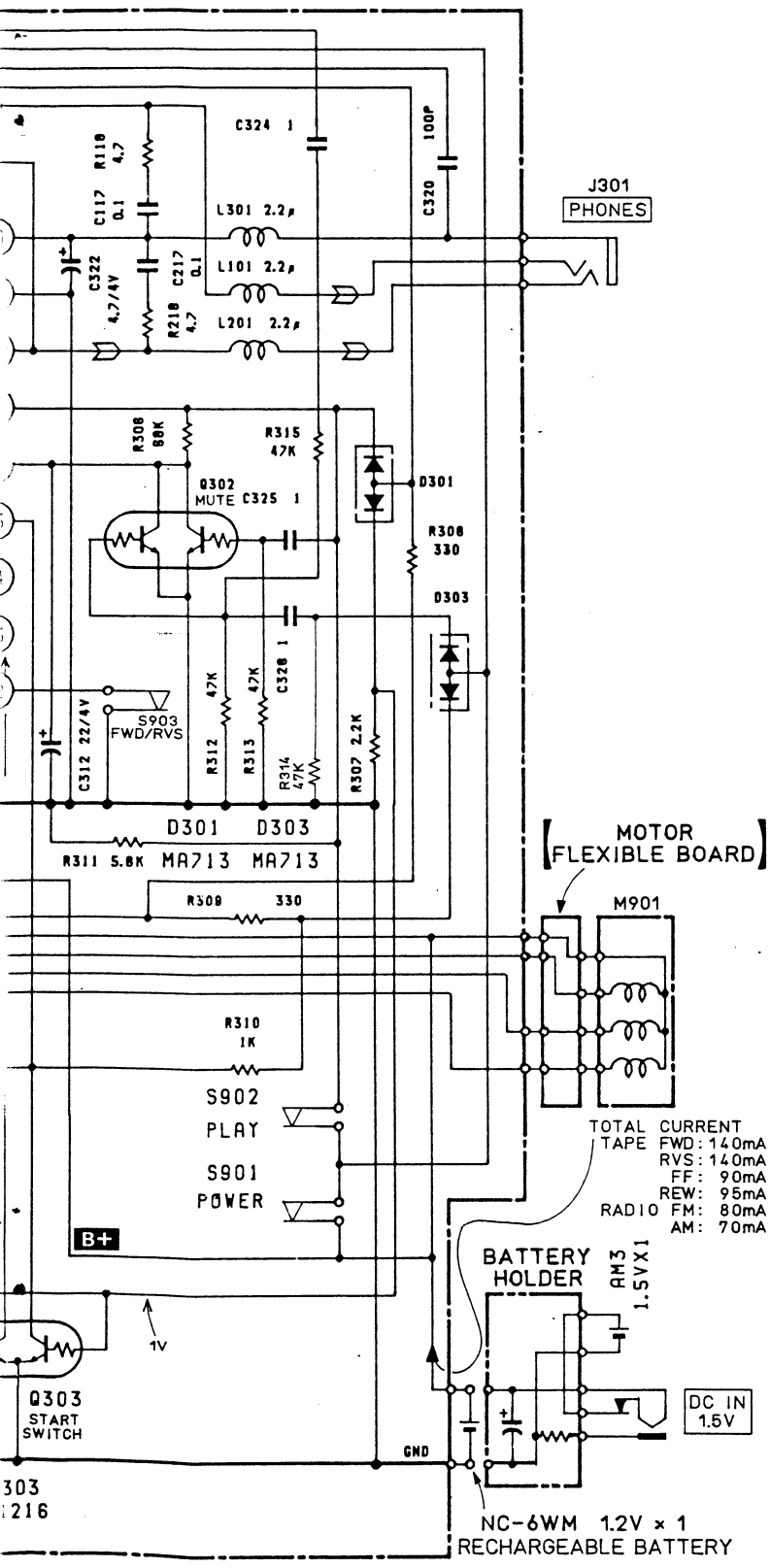
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.
- ▒ : Pattern of the rear side.

【AUDIO BOARD】




RADIO BOARD A
ARO
LCH
RCH
MUTE
2.4V
GND
P.CONT
BS
B+
ANT
CONNECTION FLEXIBLE BOARD
【AUDIO BOARD】
HP901 PB HEAD
L(RVS)
L(FWD)
R(FWD)
R(RVS)
COM
IC301 (1/2) PRE AMP
IC301 TA8159FN
S301 TAPE CrO2/METAL NORM
S301-1
S301-2
S302 DOLBY NR OFF → ON
IC302 DOLBY AMP
IC302 TA7793FN
S303 DBB MAX MID NORM
IC303 DBB AMP
IC303 CXA1249M
IC303 11PIN DBB OFF 0V ON 0.80V
RV301 VOLUME
IC301 (2/2) POWER AMP
Q301 RIPPLE FILTER
Q301 2SB1295
Q302 XN6215
S903 FWD/RVS
B+
P.CONT
2.4V
GND
L701 56μ
【DC-DC CONVERTER UNIT】
T801 DC-DC CONVERTER
L801 56μ
L802 56μ
D801
Q801 OSC
Q802 CONVERTER CONTROL
Q803 CONVERTER CONTROL
D803
THIS UNIT IS SUPPLIED AS THE ASSEMBLED BLOCK
D401 BATTERY
Q402 LED DRIVE
Q401 OSC
D401 GL2PR90
Q402 XN5501
Q401 XN1501
IC601 SERVO
IC601 LB1672M
RV601 TAPE SPEED
Q303 START SWITCH
Q303 XN1216
RADIO 0V
TC 1.15V

16 | 17 | 18 | 19 | 20



Note on Schematic Diagram :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line
- ▭ : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 1.3V and fed with regulated dc power supply from battery terminal.
- Voltage and waveforms are dc with respect to ground under no-signal in playback mode conditions.
- no mark : FWD
- ▶ : FWD ◀ : REV
  ▶▶: FF ◀◀: REW
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇨ : PB

Note on Schematic Diagram :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.

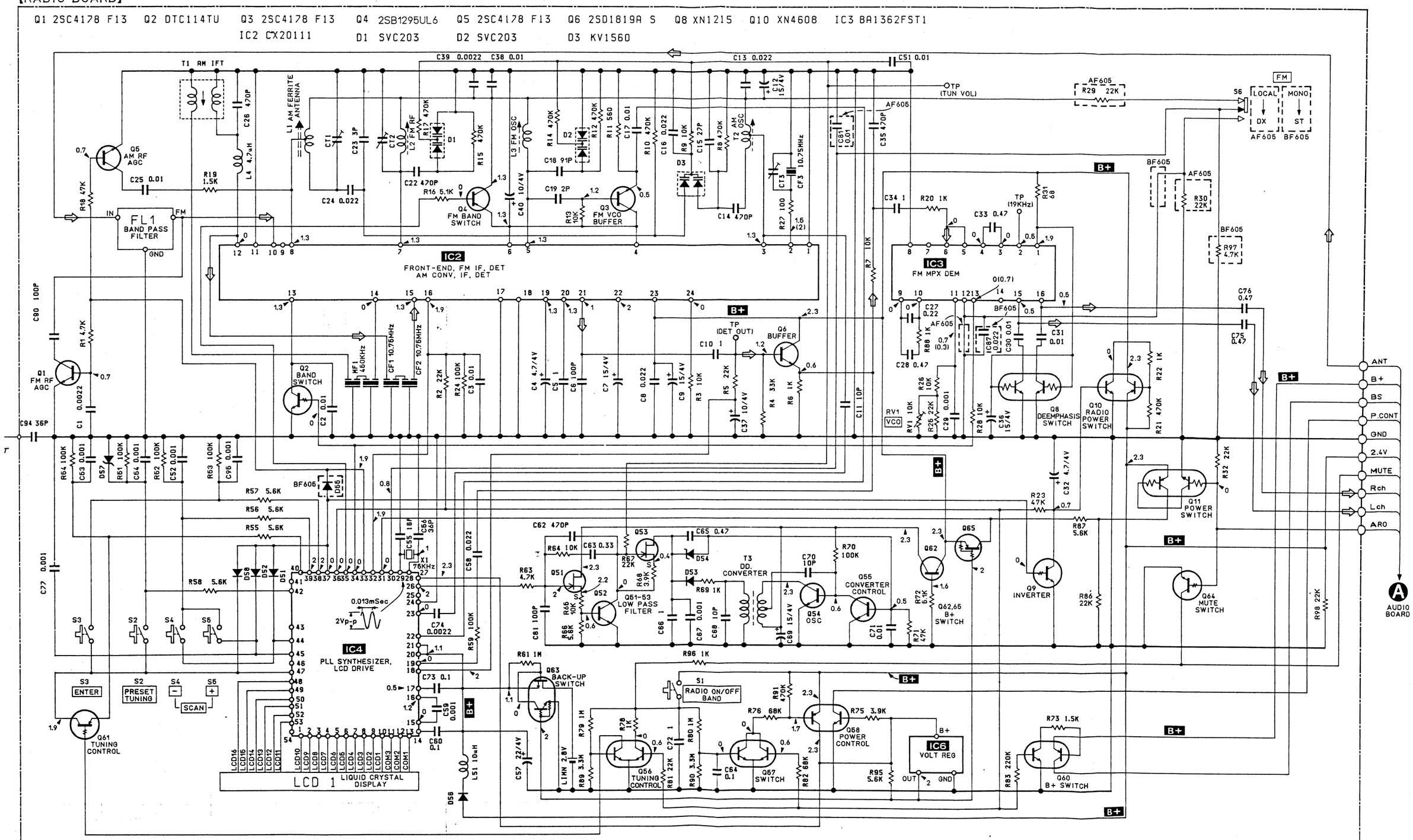
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note:** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line
- ▭ : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 1.3V and fed with regulated dc power supply from battery terminal.
- Voltage and waveforms are dc with respect to ground under no-signal in playback mode conditions.
- no mark : FWD
- ▶ : FWD ◀ : REV
  ▶▶: FF ◀◀: REW
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

A B C D E F G H I J

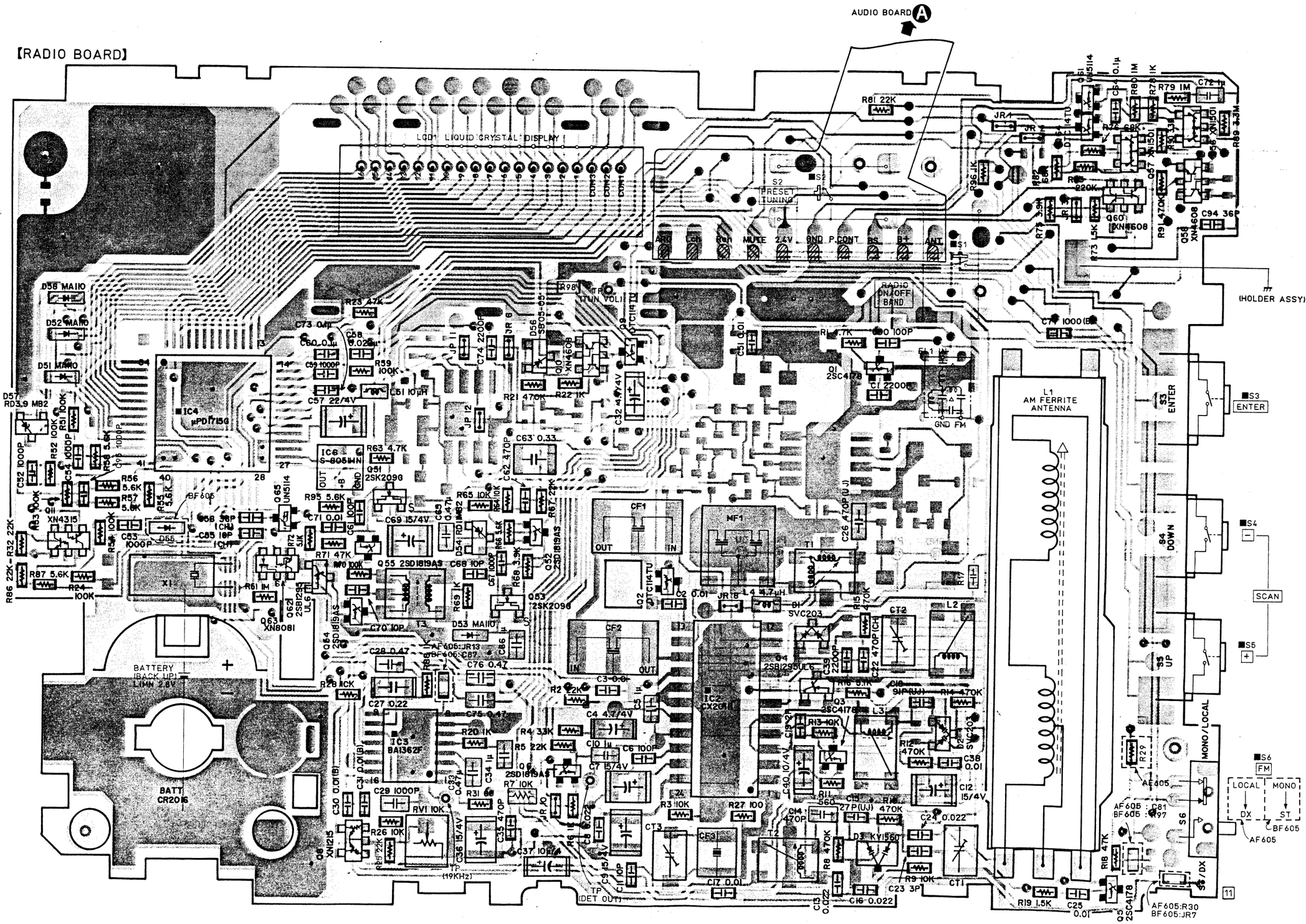
【RADIO BOARD】

Q1 2SC4178 F13 Q2 DTC114TU Q3 2SC4178 F13 Q4 2SB1295UL6 Q5 2SC4178 F13 Q6 2SD1819A S Q8 XN1215 Q10 XN4608 IC3 BA1362FST1
IC2 CX20111 D1 SVC203 D2 SVC203 D3 KV1560



Q11 XN4315 Q51 2SK209G Q52 2SD1819A S Q53 2SK209G Q54 2SD1819AS Q55 2SD1819AS Q56 XN1501 Q57 XN1501 Q58 XN4608 Q60 XN4608 Q61 UN5114 Q62 2B1295UL6 Q63 XN8081 Q64 DTC114TU
Q65 UN5114 Q9 DTC114TU
IC4 UPD1715G IC6 S-8051HN
D51 MA110 D52 MA110 D53 MA110 D54 RD3.9M-T1B2 D55 MA110 D56 SB05-05 D57 RD3.9MB2 D58 MA110

【RADIO BOARD】



● SEMICONDUCTO

Ref. No	Loca
D1	G-
D2	H-
D3	J-1
D51	E-2
D52	D-2
D53	G-6
D54	F-6
D55	F-3
D56	D-7
D57	E-1
D58	D-2
IC2	H-9
IC3	I-5
IC4	E-3
IC6	F-5
Q1	E-1
Q2	G-8
Q3	I-10
Q4	H-1
Q5	J-1
Q6	I-7
Q8	J-5
Q9	D-8
Q10	D-7
Q11	F-2
Q51	F-5
Q52	F-7
Q53	G-6
Q54	G-5
Q55	G-5
Q56	B-13
Q57	B-13
Q58	B-13
Q60	C-13
Q61	B-12
Q62	G-4
Q63	G-4
Q64	B-12
Q65	F-4

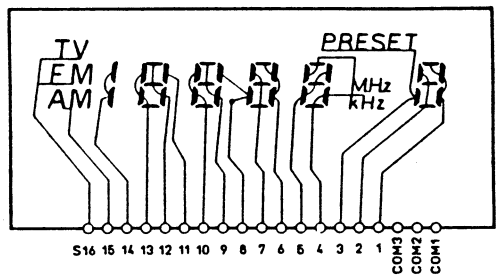
Note in Printed Wiring Boa

- ■ : parts mounted on
- ▒ : Pattern on the s
- ▒ : Pattern of the re
- ● : Through hole.

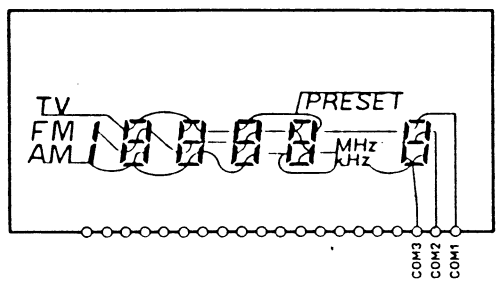
CONDUCTOR LOCATION

No	Location
	G-10
	H-11
	J-10
	E-2
	D-2
	G-6
	F-6
	F-3
	D-7
	E-1
	D-2
	H-9
	I-5
	E-3
	F-5
	E-10
	G-8
	I-10
	H-10
	J-13
	I-7
	J-5
	D-8
	D-7
	F-2
	F-5
	F-7
	G-6
	G-5
	G-5
	B-13
	B-13
	B-13
	C-13
	B-12
	G-4
	G-4
	B-12
	F-4

LCD1 SEGMENT CONNECTION



COMMON CONNECTION



nted Wiring Board :

s mounted on the conductor side.

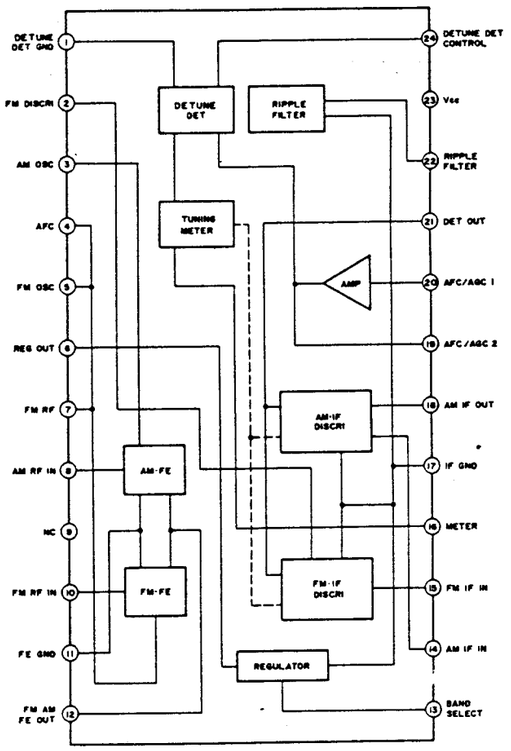
ttern on the side which is seen.

ttern of the rear side.

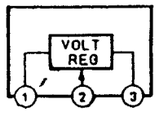
ugh hole.

4-5. IC BLOCK DIAGRAM

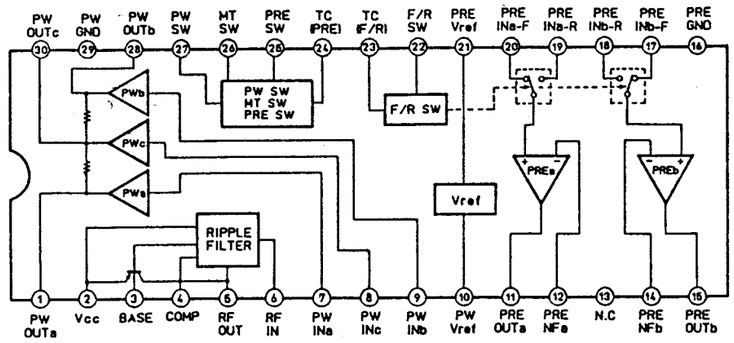
IC2 CX20111



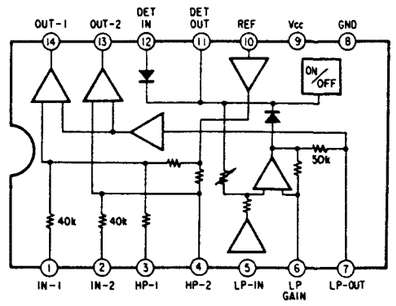
IC6 S8051HN



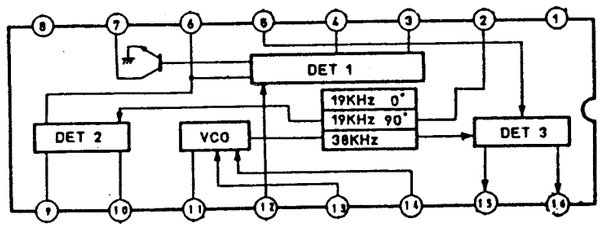
IC301 TA8159FN



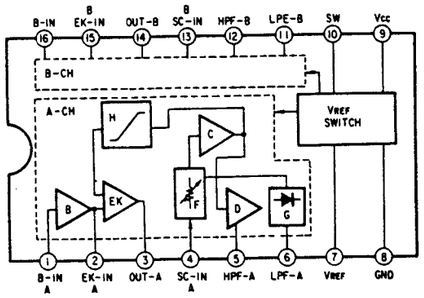
IC303 CXA1249M



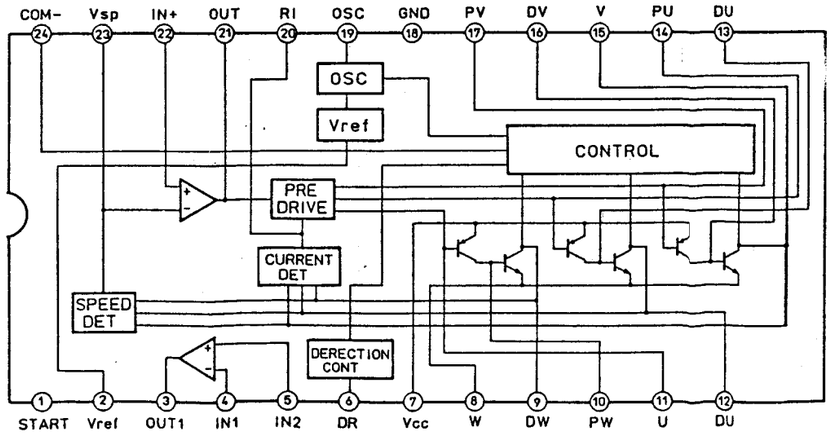
IC3 BA1362FS



IC302 TA7793F

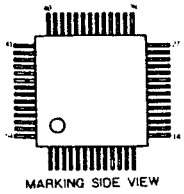


IC601 LB1672M

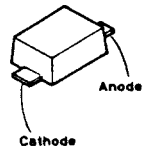


4-6. SEMICONDUCTORS LEAD LAYOUT

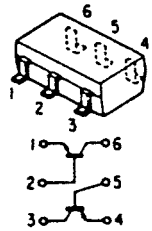
μPD1715G-68-24



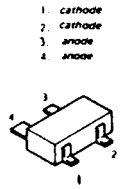
MA110



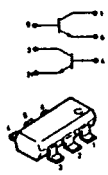
XN4315
XN4608



MA713

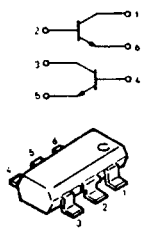


XN5501

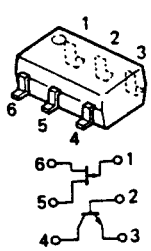


GL2PR90

XN6215



XN8081



SECTION 5
EXPLODED VIEWS

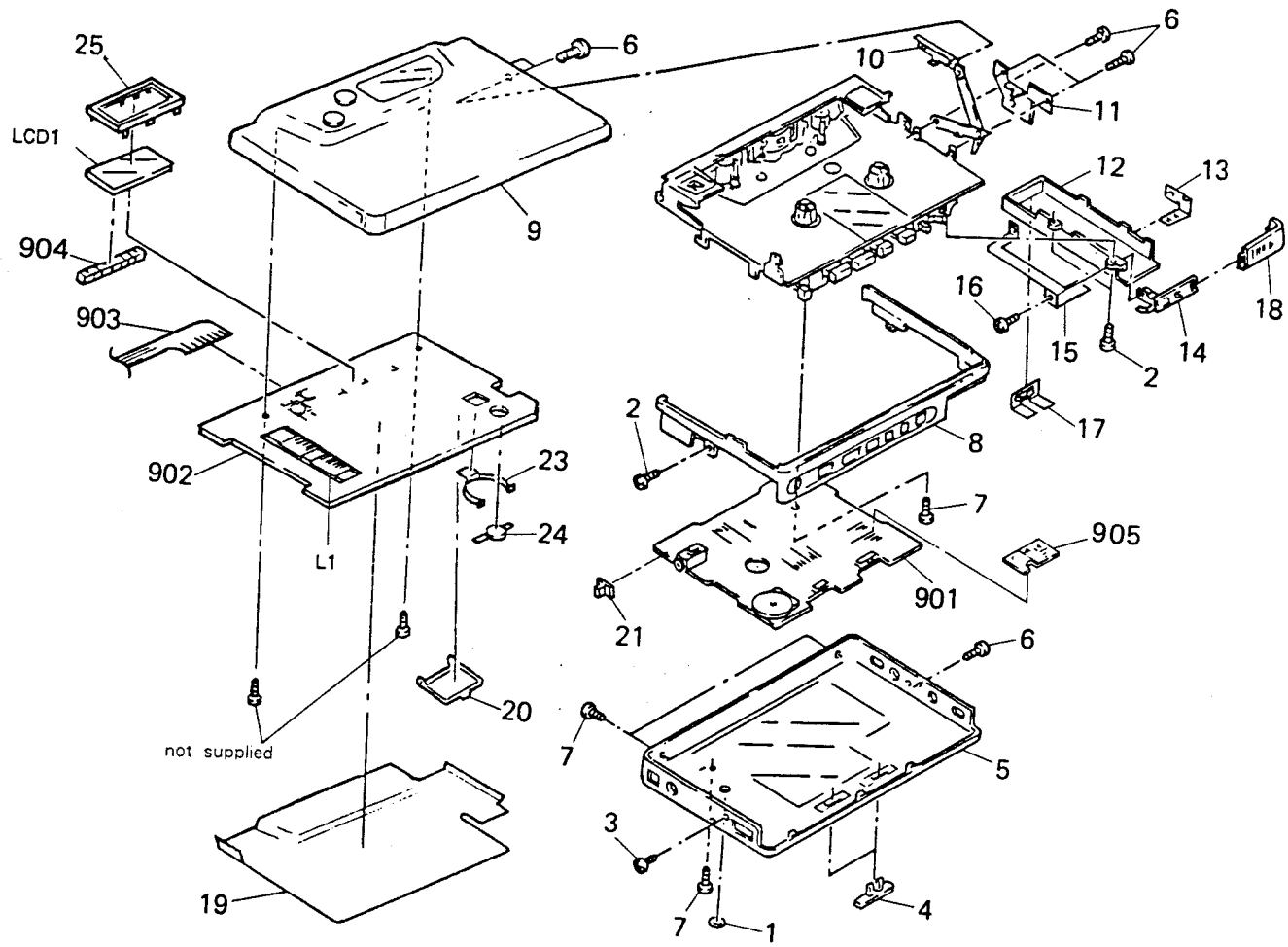
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.

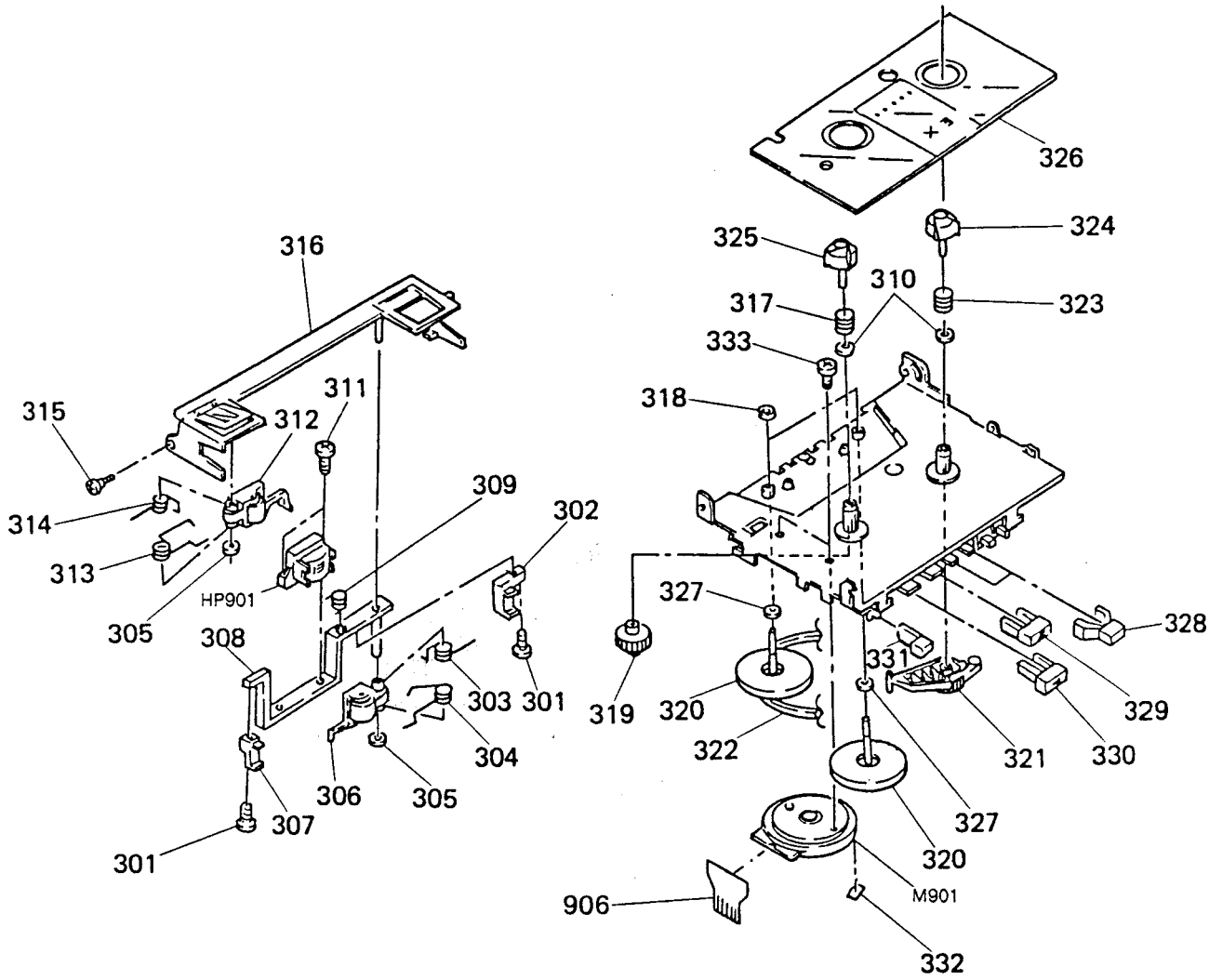
5-1. CABINET



No.	Part No.	Description	Remarks
1	3-342-380-01	SHEET, SPEED HOLE	
2	3-704-197-31	SCREW (M1.4X3.0), LOCKING	
3	3-704-197-61	SCREW (M1.4X4.0), LOCKING	
4	3-348-187-01	KNOB (TAPE)	
5	X-3352-024-1	PANEL ASSY (B), CONTROL	
6	3-704-197-01	SCREW (M1.4X1.6), LOCKING	
7	3-704-197-11	SCREW (M1.4X2.0), LOCKING	
8	3-353-514-01	ORNAMENT, REEL	
9	X-3352-023-1	(AF605)...PANEL ASSY, CASSETTE	
	X-3352-026-1	(BF605)...PANEL ASSY, CASSETTE	
10	X-3352-013-1	ARM ASSY, CLICK	
11	3-347-291-01	REINFORCEMENT	
12	3-353-104-01	HOLDER, BATTERY	
13	3-347-293-01	CONTACT (MINUS)	
14	X-3348-113-1	BOARD ASSY, TERMINAL, BATTERY	
15	3-347-292-01	CONTACT (PLUS)	
16	3-703-502-11	SCREW (1.4X2.0)	
17	3-347-294-01	TERMINAL BOARD (MINUS)	

No.	Part No.	Description	Remarks
18	3-353-503-01	LID, BATTERY CASE	
19	*3-354-408-01	COVER	
20	3-350-963-01	LID (RADIO), BATTERY CASE	
21	3-348-186-01	KNOB (DBB)	
23	3-350-954-01	TERMINAL BOARD (C), BATTERY	
24	3-350-955-01	TERMINAL BOARD (D), BATTERY	
25	*3-350-956-01	CASE, SHIELD	
901	A-3216-818-A	MOUNTED PCB, AUDIO	
902	A-3216-819-A	(AF605).....MOUNTED PCB, RADIO	
	A-3216-838-A	(BF605:AE2,UK,E33)...MOUNTED PCB, RADIO	
	A-3216-839-A	(BF605:AE5).....MOUNTED PCB, RADIO	
903	1-630-920-11	PC BOARD, CONNECTION FLEXIBLE	
904	1-535-749-11	CONDUCTOR (CONNECTION)	
905	A-3289-663-1	CONVERTER ASSY, DC-DC	
L1	1-402-282-11	ANTENNA, FERRITE-ROD (MW)	
LCD1	1-808-578-11	DISPLAY PANEL, LIQUID CRYSTAL	

5-2. MECHANISM-1
(MF-WMF180-01)

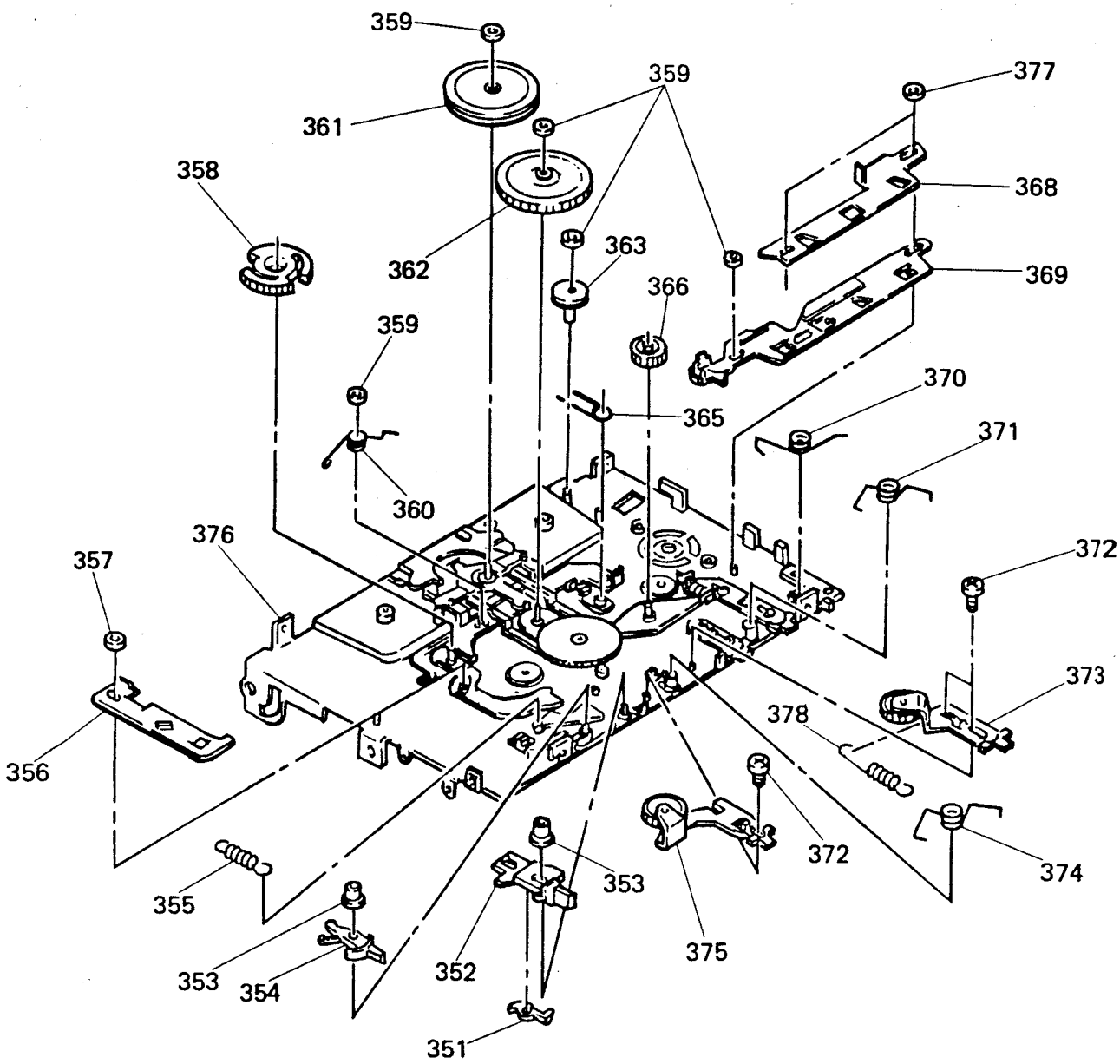


No.	Part No.	Description	Remarks
301	3-348-998-31	SCREW (M1.4X2.5), TAPPING, PAN	
302	*3-344-693-01	GUIDE (LEFT)	
303	3-341-468-01	SPRING (R)	
304	3-354-420-01	SPRING (PINCH RK), TORSION	
305	3-341-473-01	WASHER (MP)	
306	X-3331-035-1	PINCH LEVER (R) ASSY	
307	*3-344-694-01	GUIDE (RIGHT)	
308	*3-345-725-01	LEVER (AZ), HEAD	
309	3-347-205-01	SPRING (HD LEVER), TORSION	
310	3-348-990-11	WASHER (THRUST)	
311	3-348-998-71	SCREW (M1.4X4.5), TAPPING, PAN	
312	X-3331-036-1	PINCH LEVER (N) ASSY	
313	3-354-421-01	SPRING (PINCH NK), TORSION	
314	3-341-469-01	SPRING (N)	
315	3-352-005-01	SCREW (M1.4X1.6), PRECISION STEP	
316	X-3352-010-1	HOLDER (T.X) ASSY	
317	3-348-989-01	SPRING, COMPRESSION	
318	3-352-098-01	WASHER, STOPPER	

No.	Part No.	Description	Remarks
319	3-348-151-01	GEAR (TAKE-UP REEL)	
320	X-3352-007-1	WHEEL (X) ASSY, CAPSTAN	
321	X-3348-110-1	LEVER ASSY, PICK UP	
322	3-352-022-01	BELT	
323	3-348-107-01	SPRING, COMPRESSION	
324	3-348-149-01	REEL, SUPPLY	
325	3-348-150-01	REEL, TAKE-UP	
326	3-353-147-01	COVER (X.A), MD	
327	3-321-394-21	WASHER	
328	3-348-138-01	BUTTON (FR)	
329	3-348-136-01	BUTTON (STOP)	
330	3-348-134-01	BUTTON (PLAY)	
331	3-348-129-01	BUTTON (OPEN)	
332	3-703-929-01	SPACER (P)	
333	3-354-448-01	SCREW (TOOTH)	
906	1-629-873-11	PC BOARD, MOTOR FLEXIBLE	
M901	1-541-660-11	MOTOR	
HP901	1-543-650-11	HEAD, MAGNETIC (PLAYBACK)	

5-3. MECHANISM-2

(MF-WMF180-01)



No.	Part No.	Description	Remarks
351	3-348-101-01	RATCHET	
352	3-348-156-01	LEVER, DIR	
353	3-348-102-01	BUSHING	
354	3-348-105-01	LEVER, MODE SELECTION	
355	3-348-163-01	SPRING, TENSION	
356	*3-352-002-02	LEVER (X), TRIGGER	
357	3-348-953-11	WASHER	
358	3-352-032-01	GEAR (X), CAM	
359	3-348-996-01	WASHER	
360	3-348-172-03	SPRING (S.OFF), TORSION	
361	3-352-007-01	PULLEY (MIDWAY.X)	
362	X-3352-006-1	CLUTCH (X) ASSY	
363	3-352-008-01	PULLEY (REVERSE.X)	

No.	Part No.	Description	Remarks
365	3-348-159-01	SPRING (NR), TORSION	
366	3-352-021-01	GEAR (N.X)	
368	*3-352-028-01	LEVER (X), SW	
369	X-3348-102-1	LEVER ASSY, LOCK	
370	3-348-162-01	SPRING (LOCK), TORSION	
371	3-348-103-01	SPRING (PLAY), TORSION	
372	3-348-160-01	SCREW (M1.4X1.3),PRECISION PAN	
373	X-3352-004-1	LEVER (X) ASSY, FF	
374	3-348-168-01	SPRING (FR), TORSION	
375	X-3352-005-1	LEVER (X) ASSY, REW	
376	X-3352-011-1	CHASSIS (X) COMPLETE ASSY	
377	3-348-953-21	WASHER	
378	3-352-026-01	SPRING, TENSION	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description		
901	A-3216-818-A	MOUNTED PCB, AUDIO		
902	A-3216-819-A	(AF605).....MOUNTED PCB, RADIO		
	A-3216-838-A	(BF605:AE2,UK,E33)..MOUNTED PCB, RADIO		
	A-3216-839-A	(BF605:AE5).....MOUNTED PCB, RADIO		
903	1-630-920-11	PC BOARD, CONNECTION FLEXIBLE		
904	1-535-749-11	CONDUCTOR (CONNECTION)		
905	A-3289-663-1	CONVERTER ASSY, DC-DC		
906	1-629-873-11	PC BOARD, MOTOR FLEXIBLE		
C1	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C2	1-162-974-11	CERAMIC CHIP 0.01MF		50V
C3	1-162-974-11	CERAMIC CHIP 0.01MF		50V
C4	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C5	1-164-234-11	CERAMIC CHIP 1MF		10V
C6	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C7	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C8	1-162-995-11	CERAMIC CHIP 0.022MF		50V
C9	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C10	1-164-234-11	CERAMIC CHIP 1MF		10V
C11	1-162-941-11	CERAMIC CHIP 10PF	0.5PF	50V
C12	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C13	1-162-995-11	CERAMIC CHIP 0.022MF		50V
C14	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C15	1-162-920-11	CERAMIC CHIP 27PF	10%	50V
C16	1-162-995-11	CERAMIC CHIP 0.022MF		50V
C17	1-162-970-11	CERAMIC CHIP 0.01MF	10%	25V
C18	1-162-999-11	CERAMIC CHIP 91PF	5%	50V
C19	1-162-932-11	CERAMIC CHIP 2PF	0.25PF	50V
C22	1-164-315-11	CERAMIC CHIP 470PF	10%	50V
C23	1-162-934-11	CERAMIC CHIP 3PF	0.25PF	50V
C24	1-162-995-11	CERAMIC CHIP 0.022MF		50V
C25	1-162-974-11	CERAMIC CHIP 0.01MF		50V
C26	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C27	1-162-993-11	CERAMIC CHIP 0.22MF	10%	16V
C28	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C29	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C30	1-162-970-11	CERAMIC CHIP 0.01MF	10%	25V
C31	1-162-970-11	CERAMIC CHIP 0.01MF	10%	25V
C32	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C33	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C34	1-164-234-11	CERAMIC CHIP 1MF		10V
C35	1-162-962-11	CERAMIC CHIP 470PF	10%	50V
C36	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C37	1-135-201-11	TANTAL. CHIP 10MF	20%	4V
C38	1-162-970-11	CERAMIC CHIP 0.01MF	10%	25V
C39	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C40	1-135-201-11	TANTAL. CHIP 10MF	20%	4V
C51	1-162-970-11	CERAMIC CHIP 0.01MF	10%	25V
C52	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C53	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C54	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C55	1-164-237-11	CERAMIC CHIP 16PF	10%	50V
C56	1-164-238-11	CERAMIC CHIP 36PF	10%	50V
C57	1-135-202-21	TANTAL. CHIP 22MF	20%	4V
C58	1-162-995-11	CERAMIC CHIP 0.022MF		50V
C59	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C60	1-164-156-11	CERAMIC CHIP 0.1MF		25V
C61	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C62	1-162-962-11	CERAMIC CHIP 470PF	10%	50V
C63	1-164-006-11	CERAMIC CHIP 0.33MF	10%	16V
C64	1-164-156-11	CERAMIC CHIP 0.1MF		25V
C65	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C66	1-164-234-11	CERAMIC CHIP 1MF		10V
C67	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C68	1-162-941-11	CERAMIC CHIP 10PF	0.5PF	50V
C69	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C70	1-162-941-11	CERAMIC CHIP 10PF	0.5PF	50V
C71	1-162-974-11	CERAMIC CHIP 0.01MF		50V
C72	1-164-234-11	CERAMIC CHIP 1MF		10V
C73	1-164-156-11	CERAMIC CHIP 0.1MF		25V
C74	1-162-966-11	CERAMIC CHIP 0.0022MF	10%	50V
C75	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C76	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C77	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C81	1-162-970-11	(AF605)...CERAMIC CHIP 0.01MF	10%	25V
C87	1-162-995-11	(BF605)...CERAMIC CHIP 0.022MF		50V
C90	1-162-953-11	CERAMIC CHIP 100PF	5%	50V
C94	1-164-238-11	CERAMIC CHIP 36PF	10%	50V
C95	1-162-964-11	CERAMIC CHIP 0.001MF	10%	50V
C101	1-163-005-11	CERAMIC CHIP 470PF	10%	50V
C102	1-163-005-11	CERAMIC CHIP 470PF	10%	50V
C103	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V
C104	1-135-202-21	TANTAL. CHIP 22MF	20%	4V
C105	1-162-638-11	CERAMIC CHIP 1MF		16V
C106	1-163-020-00	CERAMIC CHIP 0.0082MF	5%	50V
C107	1-135-208-11	TANTAL. CHIP 1MF	20%	10V
C108	1-163-021-11	CERAMIC CHIP 0.01MF	5%	50V
C109	1-135-192-21	TANTAL. CHIP 0.47MF	10%	20V
C110	1-163-015-00	CERAMIC CHIP 0.0033MF	5%	50V
C111	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V

Ref.No.	Part No.	Description		
C112	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C113	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C114	1-126-603-11	ELECT 4.7MF	20%	35V
C115	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C116	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V
C117	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C201	1-163-005-11	CERAMIC CHIP 470PF	10%	50V
C202	1-163-005-11	CERAMIC CHIP 470PF	10%	50V
C203	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V
C204	1-126-590-11	ELECT CHIP 22MF	20%	4V
C205	1-162-638-11	CERAMIC CHIP 1MF		16V
C206	1-163-020-00	CERAMIC CHIP 0.0082MF	5%	50V
C207	1-135-177-21	TANTAL. CHIP 1MF	20%	25V
C208	1-163-021-11	CERAMIC CHIP 0.01MF	5%	50V
C209	1-135-145-11	TANTAL. CHIP 0.47MF	20%	35V
C210	1-163-015-00	CERAMIC CHIP 0.0033MF	5%	50V
C211	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C212	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C213	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C214	1-126-603-11	ELECT 4.7MF	20%	35V
C215	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C216	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V
C217	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C301	1-126-607-11	ELECT 47MF	20%	4V
C302	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C303	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C304	1-126-609-11	ELECT CHIP 3.3MF	20%	25V
C305	1-126-602-11	ELECT 3.3MF	20%	50V
C306	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C307	1-126-591-11	ELECT CHIP 10MF	20%	6.3V
C308	1-135-202-21	TANTAL. CHIP 22MF	20%	4V
C309	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C310	1-164-234-11	CERAMIC CHIP 1MF		10V
C311	1-126-605-11	ELECT 22MF	20%	6.3V
C312	1-135-202-21	TANTAL. CHIP 22MF	20%	4V
C314	1-126-811-21	ELECT 330MF		2V
C315	1-126-607-11	ELECT 47MF	20%	4V
C316	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C317	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C320	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C321	1-126-590-11	ELECT CHIP 22MF	20%	4V
C322	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C324	1-162-638-11	CERAMIC CHIP 1MF		16V
C325	1-164-234-11	CERAMIC CHIP 1MF		10V
C326	1-164-234-11	CERAMIC CHIP 1MF		10V
C401	1-135-170-21	TANTAL. CHIP 6.8MF	20%	4V
C402	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C403	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C404	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C405	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C406	1-135-201-11	TANTAL. CHIP 10MF	20%	4V
C601	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C602	1-126-601-11	ELECT 2.2MF	20%	50V
C603	1-126-601-11	ELECT 2.2MF	20%	50V
C604	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C605	1-126-601-11	ELECT 2.2MF	20%	50V
C606	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C607	1-135-179-21	TANTAL. CHIP 2.2MF	20%	16V
C608	1-162-638-11	CERAMIC CHIP 1MF		16V
C609	1-135-151-21	TANTAL. CHIP 4.7MF	20%	4V
C801	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C802	1-162-969-11	CERAMIC CHIP 0.0068MF	10%	25V
C804	1-135-158-21	TANTAL. CHIP 15MF	20%	4V
C805	1-135-201-11	TANTAL. CHIP 10MF	20%	4V
C807	1-164-234-11	CERAMIC CHIP 1MF		10V
CF1	1-577-129-11	FILTER, CRYSTAL (10.75MHz)		
CF2	1-577-129-11	FILTER, CRYSTAL (10.75MHz)		
CF3	1-567-920-21	FILTER, CERAMIC (10.75MHz)		
CT1	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
CT2	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
CT3	1-141-313-11	CAP, VAR, TRIMMER (CHIP TYPE)		
D1	8-719-939-02	DIODE SVC203CP		
D2	8-719-939-02	DIODE SVC203CP		
D3	8-719-951-05	DIODE KV1560		
D51	8-719-404-46	DIODE MA110		
D52	8-719-404-46	DIODE MA110		
D53	8-719-404-46	DIODE MA110		
D54	8-719-105-58	(BF605)...DIODE RD3.9M-T1B2		
D55	8-719-404-46	DIODE MA110		
D56	8-719-938-75	DIODE SB05-05CP		
D57	8-719-105-58	DIODE RD3.9M-T1B2		
D58	8-719-404-46	DIODE MA110		
D301	8-719-404-16	DIODE MA713		
D303	8-719-404-16	DIODE MA713		
D401	8-719-976-16	DIODE GL2PR90		
FL1	1-236-504-11	FILTER, BAND PASS		
HP901	1-543-650-11	HEAD, MAGNETIC (PLAYBACK)		
IC2	8-752-011-11	IC CX20111		
IC3	8-759-945-89	IC BA1362FS		
IC4	8-759-146-01	IC UPD1715G-681-24		
IC6	8-759-947-95	IC S-8051HN-CD-S		
IC301	8-759-231-86	IC TA8159FN		
IC302	8-759-230-90	IC TA7793FN-ER		
IC303	8-759-805-09	IC CXA1249M		
IC601	8-759-821-20	IC LB1672M		
J301	1-568-254-11	JACK 1P		
JR1	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR2	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR3	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR6	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR7	1-216-864-11	(BF605)...METAL GLAZE 0	5%	1/16W
JR8	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR10	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR11	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR12	1-216-864-11	METAL GLAZE 0	5%	1/16W
JR13	1-216-864-11	(AF605)...METAL GLAZE 0	5%	1/16W
L1	1-402-282-11	ANTENNA, FERRITE-ROD (MW)		
L2	1-459-590-11	COIL (WITH CORE)		
L3	1-459-590-11	COIL (WITH CORE)		
L4	1-412-002-31	INDUCTOR CHIP 4.7UH		
L51	1-412-006-31	INDUCTOR CHIP 10UH		
L101	1-410-997-31	INDUCTOR CHIP 2.2UH		

Ref.No.	Part No.	Description
L201	1-410-997-31	INDUCTOR CHIP 2.2UH
L301	1-410-997-31	INDUCTOR CHIP 2.2UH
L701	1-410-213-51	INDUCTOR CHIP 56UH
L801	1-410-213-51	INDUCTOR CHIP 56UH
L802	1-410-213-51	INDUCTOR CHIP 56UH
LCD1	1-808-578-11	DISPLAY PANEL, LIQUID CRYSTAL
M901	1-541-660-11	MOTOR
MF1	1-577-261-21	FILTER, CERAMIC (450kHz)
Q1	8-729-117-72	TRANSISTOR 2SC4178F13
Q2	8-729-905-99	TRANSISTOR DTC114TU
Q3	8-729-117-72	TRANSISTOR 2SC4178F13
Q4	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q5	8-729-117-72	TRANSISTOR 2SC4178F13
Q6	8-729-402-31	TRANSISTOR 2SD1819A-S-TX
Q8	8-729-403-17	TRANSISTOR XN1215
Q9	8-729-905-99	TRANSISTOR DTC114TU
Q10	8-729-402-16	TRANSISTOR XN4608
Q11	8-729-422-18	TRANSISTOR XN4315
Q51	8-729-220-93	TRANSISTOR 2SK209G
Q52	8-729-402-31	TRANSISTOR 2SD1819A-Q
Q53	8-729-220-93	TRANSISTOR 2SK209G
Q54	8-729-402-31	TRANSISTOR 2SD1819A-Q
Q55	8-729-402-31	TRANSISTOR 2SD1819A-Q
Q56	8-729-421-23	TRANSISTOR XN1216
Q57	8-729-421-23	TRANSISTOR XN1216
Q58	8-729-402-16	TRANSISTOR XN4608
Q60	8-729-402-16	TRANSISTOR XN4608
Q61	8-729-420-53	TRANSISTOR UN5114
Q62	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q63	8-729-422-13	TRANSISTOR XN8081
Q64	8-729-905-99	TRANSISTOR DTC114TU
Q65	8-729-402-96	TRANSISTOR UN5114
Q301	8-729-807-87	TRANSISTOR 2SB1295-UL6
Q302	8-729-403-10	TRANSISTOR XN6215
Q303	8-729-421-23	TRANSISTOR XN1216
Q401	8-729-421-23	TRANSISTOR XN1216
Q402	8-729-402-75	TRANSISTOR XN5501
R1	1-216-829-11	METAL GLAZE 4.7K 5% 1/16W
R2	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R3	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R4	1-216-839-11	METAL GLAZE 33K 5% 1/16W
R5	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R6	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R7	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R8	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R9	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R10	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R11	1-216-818-11	METAL GLAZE 560 5% 1/16W
R12	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R13	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R14	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R15	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R16	1-218-272-11	METAL GLAZE 5.1K 5% 1/16W
R17	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R18	1-216-841-11	METAL GLAZE 47K 5% 1/16W
R19	1-216-823-11	METAL GLAZE 1.5K 5% 1/16W
R20	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R21	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R22	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R23	1-216-841-11	METAL GLAZE 47K 5% 1/16W
R24	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R25	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R26	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R27	1-216-809-11	METAL GLAZE 100 5% 1/16W
R28	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R29	1-216-837-11	(AF605)...METAL GLAZE 22K 5% 1/16W
R30	1-216-837-11	(AF605)...METAL GLAZE 22K 5% 1/16W
R31	1-216-807-11	METAL GLAZE 68 5% 1/16W
R32	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R51	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R52	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R53	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R54	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R55	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R56	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R57	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R58	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R59	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R61	1-216-857-11	METAL GLAZE 1M 5% 1/16W
R63	1-216-829-11	METAL GLAZE 4.7K 5% 1/16W
R64	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R65	1-216-833-11	METAL GLAZE 10K 5% 1/16W
R66	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R67	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R68	1-216-828-11	METAL GLAZE 3.9K 5% 1/16W
R69	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R70	1-216-845-11	METAL GLAZE 100K 5% 1/16W
R71	1-216-841-11	METAL GLAZE 47K 5% 1/16W
R72	1-218-272-11	METAL GLAZE 5.1K 5% 1/16W
R73	1-216-823-11	METAL GLAZE 1.5K 5% 1/16W
R75	1-216-828-11	METAL GLAZE 3.9K 5% 1/16W
R76	1-216-843-11	METAL GLAZE 68K 5% 1/16W
R78	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R79	1-216-857-11	METAL GLAZE 1M 5% 1/16W
R80	1-216-857-11	METAL GLAZE 1M 5% 1/16W
R81	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R82	1-216-843-11	METAL GLAZE 68K 5% 1/16W
R83	1-216-849-11	METAL GLAZE 220K 5% 1/16W
R86	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R87	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R88	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R89	1-216-863-11	METAL GLAZE 3.3M 5% 1/16W
R90	1-216-863-11	METAL GLAZE 3.3M 5% 1/16W
R91	1-216-853-11	METAL GLAZE 470K 5% 1/16W
R95	1-216-830-11	METAL GLAZE 5.6K 5% 1/16W
R96	1-216-821-11	METAL GLAZE 1K 5% 1/16W
R97	1-216-829-11	(BF605)...METAL GLAZE 4.7K 5% 1/16W
R98	1-216-837-11	METAL GLAZE 22K 5% 1/16W
R101	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R102	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R103	1-216-117-00	METAL GLAZE 680K 5% 1/10W
R104	1-216-084-00	METAL GLAZE 30K 5% 1/10W

Ref.No.	Part No.	Description			
R105	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R106	1-216-047-00	METAL GLAZE	820	5%	1/10W
R107	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R108	1-216-086-00	METAL GLAZE	36K	5%	1/10W
R109	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R110	1-216-076-00	METAL GLAZE	13K	5%	1/10W
R111	1-216-111-00	METAL GLAZE	390K	5%	1/10W
R112	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R113	1-216-070-00	METAL GLAZE	7.5K	5%	1/10W
R114	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R115	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R117	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R118	1-216-308-00	METAL GLAZE	4.7	5%	1/10W
R201	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R202	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R203	1-216-117-00	METAL GLAZE	680K	5%	1/10W
R204	1-216-084-00	METAL GLAZE	30K	5%	1/10W
R205	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R206	1-216-047-00	METAL GLAZE	820	5%	1/10W
R207	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R208	1-216-086-00	METAL GLAZE	36K	5%	1/10W
R209	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R210	1-216-076-00	METAL GLAZE	13K	5%	1/10W
R211	1-216-111-00	METAL GLAZE	390K	5%	1/10W
R212	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R213	1-216-070-00	METAL GLAZE	7.5K	5%	1/10W
R214	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R215	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R217	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R218	1-216-308-00	METAL GLAZE	4.7	5%	1/10W
R301	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R302	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R303	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R304	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R305	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R306	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R307	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R308	1-216-037-00	METAL GLAZE	330	5%	1/10W
R309	1-216-037-00	METAL GLAZE	330	5%	1/10W
R310	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R311	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R312	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R313	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R314	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R315	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R401	1-216-041-00	METAL GLAZE	470	5%	1/10W
R402	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R403	1-216-033-00	METAL GLAZE	220	5%	1/10W
R404	1-216-033-00	METAL GLAZE	220	5%	1/10W
R405	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R406	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R601	1-216-029-00	METAL GLAZE	150	5%	1/10W
R602	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R603	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R604	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R605	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R606	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

Ref.No.	Part No.	Description
RV1	1-237-927-11	RES, ADJ, CERMET 10K (VOC)
RV301	1-238-488-11	RES, VAR, CARBON 10K/10K (VOLUME)
RV601	1-238-202-11	RES, ADJ, METAL GLAZE 2.2K (TAPE SPEED)
S1	1-571-533-31	SWITCH, KEY BOARD (RADIO ON/OFF BAND)
S2	1-571-533-31	SWITCH, KEY BOARD (PRESET TUNING)
S3	1-570-204-21	SWITCH, KEY BOARD (ENTER)
S4	1-570-204-21	SWITCH, KEY BOARD (SCAN -)
S5	1-570-204-21	SWITCH, KEY BOARD (SCAN +)
S6	1-571-275-11	SWITCH, SLIDE (FM)
S301	1-571-277-11	SWITCH, SLIDE (TAPE)
S302	1-571-275-11	SWITCH, SLIDE (DOLBY NR)
S303	1-571-506-11	SWITCH, SLIDE (DBB)
S901	1-571-585-11	SWITCH, PUSH (1 KEY)(POWER)
S902	1-571-585-11	SWITCH, PUSH (1 KEY)(PLAY)
S903	1-571-585-11	SWITCH, PUSH (1 KEY)(FWD/RVS)
T1	1-404-690-11	TRANSFORMER, IF (455kHz)
T2	1-406-177-11	COIL (AM OSC)
T3	1-449-021-21	TRANSFORMER, DC-DC CONVERTER
X1	1-577-262-11	VIBRATOR, CRYSTAL

ACCESSORY & PACKING MATERIAL

1-526-565-12	(BF605)...AC PLUG ADAPTOR
1-528-176-11	(AF605)...BATTERY, STORAGE (NC-5WM)
1-528-221-21	(US).....BATTERY CHARGER (BC-7F)
1-528-224-14	(Canadian).....BATTERY CHARGER (BC-7F)
1-528-234-11	(E33).....BATTERY CHARGER (BC-7L)
1-528-251-11	(BF605:AE2,AE5)...BATTERY CHARGER (BC-7S)
1-528-252-11	(UK).....BATTERY CHARGER (BC-7S)
1-528-231-11	(BF605)...BATTERY, NICKEL CADMIUM(NC-6WM)
1-550-492-11	CASE, BATTERY
*3-352-067-01	(AF605)...CUSHION (LOWER)
*3-352-084-01	(AF605)...CUSHION (UPPER)
*3-354-401-01	(BF605)...CUSHION (LOWER)
*3-354-402-01	(BF605)...CUSHION (UPPER)
*3-352-085-01	(AF605).....INDIVIDUAL CARTON
*3-354-403-01	(BF605:AE2,UK,AE5)...INDIVIDUAL CARTON
*3-354-405-01	(E33).....INDIVIDUAL CARTON
3-750-514-11	(EXCEPT FOR US)...MANUAL, INSTRUCTION
3-750-514-21	(US).....MANUAL, INSTRUCTION
8-952-260-92	(EXCEPT FOR E33) ...HEADPHONE MDR-W10L//K SET
8-952-350-90	(E33).....HEADPHONE MDR-E454 SET